

Beginning on page 341, strike line 24 and all that follows through page 342, line 19, and insert the following:

(1) **PROCEEDING.**—Not later than 45 days after the date of enactment of this division, the Secretary of Commerce shall commence a process to make a determination for purposes of section 2 of the Secure and Trusted Communications Networks Act of 2019 (47 U.S.C. 1601) whether future transactions involving optical transmission equipment manufactured, produced, or distributed by an entity owned, controlled, or supported by the People's Republic of China would pose an unacceptable risk to the national security of the United States or the security and safety of United States persons.

(2) **COMMUNICATION OF DETERMINATION.**—If the Secretary determines pursuant to paragraph (1) that future transactions involving such optical transmission equipment would pose an unacceptable risk consistent with that paragraph, the Secretary shall immediately transmit that determination to the Federal Communications Commission consistent with section 2 of the Secure and Trusted Communications Networks Act of 2019 (47 U.S.C. 1601).

SA 2075. Ms. HASSAN (for herself and Mr. CORNYN) submitted an amendment intended to be proposed to amendment SA 1502 proposed by Mr. SCHUMER to the bill S. 1260, to establish a new Directorate for Technology and Innovation in the National Science Foundation, to establish a regional technology hub program, to require a strategy and report on economic security, science, research, innovation, manufacturing, and job creation, to establish a critical supply chain resiliency program, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

SEC. ____. **CYBERSECURITY AND INFRASTRUCTURE SECURITY APPRENTICESHIP PROGRAM.**

(a) **IN GENERAL.**—Subtitle A of title XXII of the Homeland Security Act (6 U.S.C. 651 et seq.) is amended by adding at the end the following:

“SEC. 2218. APPRENTICESHIP PROGRAM.

“(a) DEFINITIONS.—In this section:

“(1) AREA CAREER AND TECHNICAL EDUCATION SCHOOL.—The term ‘area career and technical education school’ has the meaning given the term in section 3 of the Carl D. Perkins Career and Technical Education Act of 2006 (20 U.S.C. 2302).

“(2) COMMUNITY COLLEGE.—The term ‘community college’ means a public institution of higher education at which the highest degree that is predominantly awarded to students is an associate’s degree, including—

“(A) a 2-year Tribal College or and University, as defined in section 316 of the Higher Education Act of 1965 (20 U.S.C. 1059c); and

“(B) a public 2-year State institution of higher education.

“(3) CYBERSECURITY WORK ROLES.—The term ‘cybersecurity work roles’ means the work roles outlined in the National Initiative for Cybersecurity Education Cybersecurity Workforce Framework (NIST Special Publication 800–181), or any successor framework.

“(4) EDUCATION AND TRAINING PROVIDER.—The term ‘education and training provider’ means—

“(A) an area career and technical education school;

“(B) an early college high school;

“(C) an educational service agency;

“(D) a high school;

“(E) a local educational agency or State educational agency;

“(F) a Tribal educational agency, Tribally controlled college or university, or Tribally controlled postsecondary career and technical institution;

“(G) a postsecondary educational institution;

“(H) a minority-serving institution;

“(I) a provider of adult education and literacy activities under the Adult Education and Family Literacy Act (29 U.S.C. 3271 et seq.);

“(J) a local agency administering plans under title I of the Rehabilitation Act of 1973 (29 U.S.C. 720 et seq.), other than section 112 or part C of that title (29 U.S.C. 732, 741);

“(K) a related instruction provider, including a qualified intermediary acting as a related instruction provider as approved by a registration agency;

“(L) a Job Corps center, as defined in section 142 of the Workforce Innovation and Opportunity Act (29 U.S.C. 3192); or

“(M) a consortium of entities described in any of subparagraphs (A) through (L).

“(5) ELIGIBLE ENTITY.—

“(A) IN GENERAL.—The term ‘eligible entity’ means—

“(i) a program sponsor;

“(ii) a State workforce development board or State workforce agency, or a local workforce development board or local workforce development agency;

“(iii) an education and training provider;

“(iv) if the applicant is in a State with a State apprenticeship agency, such State apprenticeship agency;

“(v) an Indian Tribe or Tribal organization;

“(vi) an industry or sector partnership, a group of employers, a trade association, or a professional association that sponsors or participates in a program under the national apprenticeship system;

“(vii) a Governor of a State;

“(viii) a labor organization or joint labor-management organization; or

“(ix) a qualified intermediary.

“(B) SPONSOR REQUIREMENT.—Not fewer than 1 entity described in subparagraph (A) shall be the sponsor of a program under the national apprenticeship system.

“(6) INSTITUTION OF HIGHER EDUCATION.—The term ‘institution of higher education’ has the meaning given the term in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001).

“(7) LOCAL EDUCATIONAL AGENCY; SECONDARY SCHOOL.—The terms ‘local educational agency’ and ‘secondary school’ have the meanings given those terms in section 8101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801).

“(8) LOCAL WORKFORCE DEVELOPMENT BOARD.—The term ‘local workforce development board’ has the meaning given the term ‘local board’ in section 3 of the Workforce Innovation and Opportunity Act (29 U.S.C. 3102).

“(9) NONPROFIT ORGANIZATION.—The term ‘nonprofit organization’ means an organization that is described in section 501(c) of the Internal Revenue Code of 1986 and exempt from taxation under section 501(a) of such Code.

“(10) PROVIDER OF ADULT EDUCATION.—The term ‘provider of adult education’ has the meaning given the term ‘eligible provider’ in section 203 of the Adult Education and Family Literacy Act (29 U.S.C. 3272).

“(11) RELATED INSTRUCTION.—The term ‘related instruction’ means an organized and systematic form of instruction designed to provide an individual in an apprenticeship program with the knowledge of the technical subjects related to the intended occupation

of the individual after completion of the program.

“(12) SPONSOR.—The term ‘sponsor’ means any person, association, committee, or organization operating an apprenticeship program and in whose name the program is, or is to be, registered or approved.

“(13) STATE APPRENTICESHIP AGENCY.—The term ‘State apprenticeship agency’ has the meaning given the term in section 29.2 of title 29, Code of Federal Regulations, or any corresponding similar regulation or ruling.

“(14) STATE WORKFORCE DEVELOPMENT BOARD.—The term ‘State workforce development board’ has the meaning given the term ‘State board’ in section 3 of the Workforce Innovation and Opportunity Act (29 U.S.C. 3102).

“(15) WIOA TERMS.—The terms ‘career planning’, ‘community-based organization’, ‘economic development agency’, ‘industry or sector partnership’, ‘on-the-job training’, ‘recognized postsecondary credential’, and ‘workplace learning advisor’ have the meanings given those terms in section 3 of the Workforce Innovation and Opportunity Act (29 U.S.C. 3102).

“(16) QUALIFIED INTERMEDIARY.—

“(A) IN GENERAL.—The term ‘qualified intermediary’ means an entity that demonstrates expertise in building, connecting, sustaining, and measuring the performance of partnerships described in subparagraph (B) and serves program participants and employers by—

“(i) connecting employers to programs under the national apprenticeship system;

“(ii) assisting in the design and implementation of such programs, including curriculum development and delivery for related instruction;

“(iii) supporting entities, sponsors, or program administrators in meeting the registration and reporting requirements of this Act;

“(iv) providing professional development activities such as training to mentors;

“(v) supporting the recruitment, retention, and completion of potential program participants, including nontraditional apprenticeship populations and individuals with barriers to employment;

“(vi) developing and providing personalized program participant supports, including by partnering with organizations to provide access to or referrals for supportive services and financial advising;

“(vii) providing services, resources, and supports for development, delivery, expansion, or improvement of programs under the national apprenticeship system; or

“(viii) serving as a program sponsor.

“(B) PARTNERSHIPS.—The term ‘partnerships described in subparagraph (B)’ means partnerships among entities involved in, or applying to participate in, programs under the national apprenticeship system, including—

“(i) industry or sector partnerships;

“(ii) partnerships among employers, joint labor-management organizations, labor organizations, community-based organizations, industry associations, State or local workforce development boards, education and training providers, social service organizations, economic development organizations, Indian Tribes or Tribal organizations, one-stop operators, one-stop partners, or veterans service organizations in the State workforce development system; or

“(iii) partnerships among 1 or more of the entities described in clauses (i) and (ii).

“(b) ESTABLISHMENT OF APPRENTICESHIP PROGRAMS.—Not later than 2 years after the date of enactment of this section, the Director may establish 1 or more apprenticeship programs as described in subsection (c).

“(c) APPRENTICESHIP PROGRAMS DESCRIBED.—An apprenticeship program described in this subsection is an apprenticeship program that—

“(1) leads directly to employment in—

“(A) a cybersecurity work role with the Agency; or

“(B) a position with a company or other entity provided that the position is—

“(i) certified by the Director as contributing to the national cybersecurity of the United States; and

“(ii) funded at least in majority part through a contract, grant, or cooperative agreement with the Agency;

“(2) is focused on competencies and related learning necessary, as determined by the Director, to meet the immediate and ongoing needs of cybersecurity work roles at the Agency; and

“(3) is registered with and approved by the Office of Apprenticeship of the Department of Labor or a State apprenticeship agency pursuant to the Act of August 16, 1937 (commonly known as the ‘National Apprenticeship Act’; 29 U.S.C. 50 et seq.).

“(d) COORDINATION.—In the development of an apprenticeships program under this section, the Director shall consult with the Secretary of Labor, the Director of the National Institute of Standards and Technology, the Secretary of Defense, the Director of the National Science Foundation, and the Director of the Office of Personnel Management to leverage existing resources, research, communities of practice, and frameworks for developing cybersecurity apprenticeship programs.

“(e) OPTIONAL USE OF GRANTS OR COOPERATIVE AGREEMENTS.—An apprenticeship program under this section may include entering into a contract or cooperative agreement with or making a grant to an eligible entity if determined appropriate by the Director based on the eligible entity—

“(1) demonstrating experience in implementing and providing career planning and career pathways toward apprenticeship programs;

“(2) having knowledge of cybersecurity workforce development;

“(3) being eligible to enter into a contract or cooperative agreement with or receive grant funds from the Agency as described in this section;

“(4) providing students who complete the apprenticeship program with a recognized postsecondary credential;

“(5) using related instruction that is specifically aligned with the needs of the Agency and utilizes workplace learning advisors and on-the-job training to the greatest extent possible; and

“(6) demonstrating successful outcomes connecting graduates of the apprenticeship program to careers relevant to the program.

“(f) APPLICATIONS.—If the Director enters into an arrangement as described in subsection (e), an eligible entity seeking a contract, cooperative agreement, or grant under the program shall submit to the Director an application at such time, in such manner, and containing such information as the Director may require.

“(g) PRIORITY.—In selecting eligible entities to receive a contract, grant, or cooperative agreement under this section, the Director may prioritize an eligible entity that—

“(1) is a member of an industry or sector partnership;

“(2) provides related instruction for an apprenticeship program through—

“(A) a local educational agency, a secondary school, a provider of adult education, an area career and technical education school, or an institution of higher education; or

“(B) an apprenticeship program that was registered with the Department of Labor or

a State apprenticeship agency before the date on which the eligible entity applies for the grant under subsection (g);

“(3) works with the Secretary of Defense, the Secretary of Veterans Affairs, or veterans organizations to transition members of the Armed Forces and veterans to apprenticeship programs in a relevant sector; or

“(4) plans to use the grant to carry out the apprenticeship program with an entity that receives State funding or is operated by a State agency.

“(h) TECHNICAL ASSISTANCE.—The Director shall provide technical assistance to eligible entities to leverage the existing job training and education programs of the Agency and other relevant programs at appropriate Federal agencies.

“(i) EXCEPTED SERVICE.—Participants in the program may be entered into cybersecurity-specific excepted service positions as determined appropriate by the Director and authorized by section 2208.

“(j) REPORT.—

“(1) IN GENERAL.—Not less than once every 2 years after the establishment of an apprenticeship program under this section, the Director shall submit to Congress a report on the program, including—

“(A) a description of—

“(i) any activity carried out by the Agency under this section;

“(ii) any entity that enters into a contract or agreement with or receives a grant from the Agency under subsection (e);

“(iii) any activity carried out using a contract, agreement, or grant under this section as described in subsection (e); and

“(iv) best practices used to leverage the investment of the Federal Government under this section; and

“(B) an assessment of the results achieved by the program, including the rate of continued employment at the Agency for participants after completing an apprenticeship program carried out under this section.

“(k) PERFORMANCE REPORTS.—Not later than 1 year after the establishment of an apprenticeship program under this section, and annually thereafter, the Director shall submit to Congress and the Secretary of Labor a report on the effectiveness of the program based on the accountability measures described in clauses (i) and (ii) of section 116(b)(2)(A) of the Workforce Innovation and Opportunity Act (29 U.S.C. 3141(b)(2)(A)).

“(l) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Agency such sums as necessary to carry out this section.”.

(b) TECHNICAL AND CONFORMING AMENDMENT.—The table of contents in section 1(b) of the Homeland Security Act of 2002 (Public Law 107-296; 116 Stat. 2135) is amended by inserting after the item relating to section 2217 the following:

“Sec. 2218. Apprenticeship program.”.

SEC. ____ PILOT PROGRAM ON CYBER TRAINING FOR VETERANS AND MEMBERS OF THE ARMED FORCES TRANSITIONING TO CIVILIAN LIFE.

(a) DEFINITIONS.—In this section:

(1) ELIGIBLE INDIVIDUAL.—The term “eligible individual” means an individual who is—

(A) a member of the Armed Forces transitioning from service in the Armed Forces to civilian life; or

(B) a veteran.

(2) PORTABLE CREDENTIAL.—The term “portable credential”—

(A) means a documented award by a responsible and authorized entity that has determined that an individual has achieved specific learning outcomes relative to a given standard; and

(B) includes a degree, diploma, license, certificate, badge, and professional or industry certification that—

(i) has value locally and nationally in labor markets, educational systems, or other contexts;

(ii) is defined publicly in such a way that allows educators, employers, and other individuals and entities to understand and verify the full set of skills represented by the credential; and

(iii) enables a holder of the credential to move vertically and horizontally within and across training and education systems for the attainment of other credentials.

(3) VETERAN.—The term “veteran” has the meaning given the term in section 101 of title 31, United States Code.

(4) WORK-BASED LEARNING.—The term “work-based learning” has the meaning given the term in section 3 of the Carl D. Perkins Career and Technical Education Act of 2006 (20 U.S.C. 2302).

(b) ESTABLISHMENT.—Not later than 1 year after the date of enactment of this Act, the Secretary of Veterans Affairs shall establish a pilot program under which the Secretary shall provide cyber-specific training for eligible individuals.

(c) ELEMENTS.—The pilot program established under subsection (b) shall incorporate—

(1) virtual platforms for coursework and training;

(2) hands-on skills labs and assessments;

(3) Federal work-based learning opportunities and programs; and

(4) the provision of portable credentials to eligible individuals who graduate from the pilot program.

(d) ALIGNMENT WITH NICE WORKFORCE FRAMEWORK FOR CYBERSECURITY.—The pilot program established under subsection (b) shall align with the taxonomy, including work roles and associated tasks, knowledge, and skills, from the National Initiative for Cybersecurity Education Workforce Framework for Cybersecurity (NIST Special Publication 800-181), or any successor framework.

(e) COORDINATION.—

(1) TRAINING, PLATFORMS, AND FRAMEWORKS.—In developing the pilot program under subsection (b), the Secretary of Veterans Affairs shall coordinate with the Secretary of Defense, the Secretary of Homeland Security, the Secretary of Labor, and the Director of the Office of Personnel Management to evaluate and, where possible, leverage existing training, platforms, and frameworks of the Federal Government for providing cyber education and training to prevent duplication of efforts.

(2) FEDERAL WORK-BASED LEARNING OPPORTUNITIES AND PROGRAMS.—In developing the Federal work-based learning opportunities and programs required under subsection (c)(3), the Secretary of Veterans Affairs shall coordinate with the Secretary of Defense, the Secretary of Homeland Security, the Secretary of Labor, the Director of the Office of Personnel Management, and the heads of other appropriate Federal agencies to identify or create interagency opportunities that will enable the pilot program established under subsection (b) to—

(A) bridge the gap between knowledge acquisition and skills application for participants; and

(B) give participants the experience necessary to pursue Federal employment.

(f) RESOURCES.—

(1) IN GENERAL.—In any case in which the pilot program established under subsection (b)—

(A) uses a program of the Department of Veterans Affairs or platforms and frameworks described in subsection (e)(1), the Secretary of Veterans Affairs shall take such actions as may be necessary to ensure that those programs, platforms, and frameworks are expanded and resourced to accommodate

usage by eligible individuals participating in the pilot program; or

(B) does not use a program of the Department of Veterans Affairs or platforms and frameworks described in subsection (e)(1), the Secretary of Veterans Affairs shall take such actions as may be necessary to develop or procure programs, platforms, and frameworks necessary to carry out the requirements of subsection (c) and accommodate the usage by eligible individuals participating in the pilot program.

(2) ACTIONS.—Actions described in paragraph (1) may include providing additional funding, staff, or other resources to—

(A) provide administrative support for basic functions of the pilot program;

(B) ensure the success and ongoing engagement of eligible individuals participating in the pilot program;

(C) connect graduates of the pilot program to job opportunities within the Federal Government; and

(D) allocate dedicated positions for term employment to enable Federal work-based learning opportunities and programs for participants to gain the experience necessary to pursue permanent Federal employment.

SA 2076. Ms. HASSAN submitted an amendment intended to be proposed to amendment SA 1835 submitted by Ms. HASSAN and intended to be proposed to the amendment SA 1502 proposed by Mr. SCHUMER to the bill S. 1260, to establish a new Directorate for Technology and Innovation in the National Science Foundation, to establish a regional technology hub program, to require a strategy and report on economic security, science, research, innovation, manufacturing, and job creation, to establish a critical supply chain resiliency program, and for other purposes; which was ordered to lie on the table; as follows:

In lieu of the matter proposed to be added, add the following:

SECTION 3219L. ACTION PLAN AND REPORT ON OUTCOMES OF THE WORLD HEALTH ASSEMBLY.

(a) DEFINITIONS.—In this section:

(1) APPROPRIATE COMMITTEES OF CONGRESS.—The term “appropriate committees of Congress” means—

(A) the Committee on Foreign Relations of the Senate;

(B) the Select Committee on Intelligence of the Senate;

(C) the Committee on Health, Education, Labor, and Pensions of the Senate;

(D) the Committee on Foreign Affairs of the House of Representatives;

(E) the Permanent Select Committee on Intelligence of the House of Representatives;

(F) the Committee on Energy and Commerce of the House of Representatives.

(2) WHA.—The term “WHA” means the World Health Assembly.

(b) REPORT ON OFFICE OF GLOBAL AFFAIRS ACTIVITIES FOLLOWING COVID-19 PANDEMIC.—Not later than 1 year after the date of enactment of this Act, the Secretary of Health and Human Services, shall provide to the appropriate committees of Congress a report that includes—

(1) a summary of planned interagency and global health efforts that the Office of Global Affairs intends to take in its work with international institutions, including the World Health Organization and its member states, in response to lessons learned during the COVID-19 pandemic;

(2) a description of the actions taken by the Office of Global Affairs as part of the

COVID-19 pandemic response that could address future public health emergencies of international concern;

(3) an assessment of engagements with the People's Republic of China regarding COVID-19, both bilaterally and through international institutions; and

(4) how the lessons learned from the assessment described in paragraph (3) could be applied to future scenarios to address public health emergencies of international concern.

(c) ANNUAL REPORT ON THE WORLD HEALTH ASSEMBLY.—Not later than 180 days after the closing session of each annual WHA, the Secretary of Health and Human Services, in coordination with the Director of National Intelligence, the Secretary of State, and the heads of other relevant executive departments, shall submit a report to the appropriate committees of Congress that describes—

(1) the strategy of the United States Government for addressing national security and public health risks related to COVID-19 and emerging infectious diseases through diplomatic engagements;

(2) the actions taken by the United States Government during such annual WHA; and

(3) how the results of such actions advance the goals of the United States Government.

(d) FORM.—The report required under subsection (c) shall be submitted in unclassified form, but may include a classified annex.

SA 2077. Mr. BROWN submitted an amendment intended to be proposed to amendment SA 1502 proposed by Mr. SCHUMER to the bill S. 1260, to establish a new Directorate for Technology and Innovation in the National Science Foundation, to establish a regional technology hub program, to require a strategy and report on economic security, science, research, innovation, manufacturing, and job creation, to establish a critical supply chain resiliency program, and for other purposes; which was ordered to lie on the table; as follows:

Strike section 3138.

SA 2078. Mr. BROWN submitted an amendment intended to be proposed to amendment SA 1502 proposed by Mr. SCHUMER to the bill S. 1260, to establish a new Directorate for Technology and Innovation in the National Science Foundation, to establish a regional technology hub program, to require a strategy and report on economic security, science, research, innovation, manufacturing, and job creation, to establish a critical supply chain resiliency program, and for other purposes; which was ordered to lie on the table; as follows:

At the end of division F, insert the following:

TITLE —STEM RESEARCH GAINS

SEC. —01. SHORT TITLE.

This title may be cited as the “Strengthening the STEM Research Workforce to Generate American Infrastructure for National Security Act of 2021” or the “STEM Research GAINS Act of 2021”.

SEC. —02. DEFINITIONS.

In this title:

(1) COVERED FIELD.—The term “covered field” means a field in science, technology, engineering, or mathematics research or development that is determined to be—

(A) a subject area relating to the national security of the United States;

(B) a subject area relating to the United States’ ability to compete in an open, fair, and competitive international market and achieve economic growth; or

(C) a subject area that is in need of expanded and strengthened academic pipelines to ensure a diverse workforce.

(2) DIRECTOR.—The term “Director” means the Director of the National Science Foundation.

(3) FEDERAL SCIENCE AGENCY.—The term “Federal science agency” has the meaning given the term in section 103(f) of the America COMPETES Reauthorization Act of 2010 (42 U.S.C. 6623(f)).

(4) INSTITUTION OF HIGHER EDUCATION.—The term “institution of higher education” means an institution of higher education described in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001).

(5) MINORITY.—The term “minority” has the meaning given the term in section 356(2) of the Higher Education Act of 1965 (20 U.S.C. 1067k(2)).

(6) MINORITY-SERVING INSTITUTION.—The term “minority-serving institution” means—

(A) a part B institution (as defined in section 322 of the Higher Education Act of 1965 (20 U.S.C. 1061));

(B) a Hispanic-serving institution (as defined in section 502 of that Act (20 U.S.C. 1101a));

(C) a Tribal College or University (as defined in section 316 of that Act (20 U.S.C. 1059c));

(D) an Alaska Native-serving institution (as defined in section 317(b) of that Act (20 U.S.C. 1059d(b)));

(E) a Native Hawaiian-serving institution (as defined in section 317(b) of that Act (20 U.S.C. 1059d(b)));

(F) a Predominantly Black Institution (as defined in section 318 of that Act (20 U.S.C. 1059e));

(G) an Asian American and Native American Pacific Islander-serving institution (as defined in section 320(b) of that Act (20 U.S.C. 1059g(b))); or

(H) a Native American-serving, nontribal institution (as defined in section 319 of that Act (20 U.S.C. 1059f)).

(7) STEM.—The term “STEM” means science, technology, engineering, and mathematics, including computer science.

(8) UNDERREPRESENTED FIELD.—The term “underrepresented field” means a field in STEM in which the national rate of representation of women among tenured, tenure-track faculty, or nonfaculty researchers at doctorate-granting institutions of higher education is less than 25 percent, according to the most recent data available from the National Center for Science and Engineering Statistics.

(9) UNDERREPRESENTED IN SCIENCE AND ENGINEERING.—The term “underrepresented in science and engineering” means a minority group whose number of scientists and engineers, per 10,000 population of that group, is substantially below the comparable figure for scientists and engineers who are white and not of Hispanic origin, as determined by the Secretary of Education under section 637.4(b) of title 34, Code of Federal Regulations, or similar successor regulations.

Subtitle A—Expanding Pipeline Programs to Research Opportunities

SEC. —11. RESEARCH AND DEVELOPMENT AREAS CRITICAL TO NATIONAL SECURITY.

(a) COVERED FIELDS.—The National Security Council shall conduct a study to identify areas for research and development that are covered fields.

(b) UPDATE.—Not less than once every 5 years, the National Security Council shall reassess the covered fields.